

## REMARKS

This Amendment is submitted in response to the Examiner's Action dated August 29, 2002, having a shortened statutory period set to expire November 29, 2002.

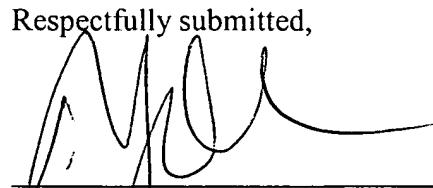
In that Action the Examiner has rejected Claims 1, 2, 5, 7, 8, 10-14, 16 and 17 under 35 U.S.C. §102(e) as being anticipated by *Diab, et al.*, U.S. Patent No. 5,782,757 and has rejected Claims 3 and 4 under 35 U.S.C. §103(a) as being unpatentable over that same reference. Those rejections, insofar as they might be applied to the claims as amended herein, are respectfully traversed.

Applicant has amended Claims 1 and 10 to expressly recite the presence of an electrical conductor channel formed within the opaque, semi-cylindrical, substantially rigid cradle member as previously generally set forth within Claims 6 and 15. As the Examiner has indicated that those claims were objected to and would be allowable upon presentation in independent form, Applicant urges that Claims 1 and 10 are now in condition for allowance and passage of this Application to issue with Claims 1-5, 7-14 and 16-17 is respectfully requested.

No fee is believed to be required; however, in the event any additional fees are required, please charge **Bracewell & Patterson, L.L.P. Deposit Account No. 50-0259**. No extension of time is believed to be required; however, in the event any extension of time is required, please consider

that extension requested and please charge any associated fee and any additional required fees, to  
**Bracewell & Patterson, L.L.P. Deposit Account No. 50-0259.**

Respectfully submitted,



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Reg. No. 29,634

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**REDACTED CLAIMS:**

1       --1. (Twice Amended) A non-invasive electro-optical sensor for removable adhesive attachment  
2       to a fingertip of a patient for use in measuring light extinction during transillumination of the blood-  
3       profused tissue within said fingertip, said sensor comprising:

4               an opaque, semi-cylindrical, substantially rigid cradle member having an electrical conductor  
5       channel formed therein, a concave surface, a convex surface and a diameter larger than the diameter  
6       of a human fingertip;

7               a flexible, initially substantially planar web-like support structure attached at one end thereof  
8       to said cradle member;

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9               a photosensor mounted on said concave surface of said cradle member;

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10               a light source mounted in said web of said support structure, said light source having a light-  
11       emitting surface which directly overlies said photosensor when said support structure is wrapped  
12       around a human fingertip within said cradle member; and

13               an adhesive layer on said concave surface of said cradle member and/or on a surface of the  
14       web-like support structure for removably adhesively securing said concave surface of said cradle  
15       member to a fleshy portion of a human fingertip such that said concave surface is held in  
16       conformance with said human fingertip without stressing said human fingertip.--

1       2. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 further including  
2       means for securing said support structure in a wrapped position around a human fingertip within said  
3       cradle member such that said light source directly overlies said photosensor.

*underlining  
added  
for 1.173(b)  
compliance  
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1       3. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 wherein said opaque,  
2       semi-cylindrical, substantially rigid cradle member is constructed of molded polyolefin plastic.

1       4. (Unchanged) The non-invasive electro-optical sensor according to Claim 3 wherein said opaque,  
2       semi-cylindrical, substantially rigid cradle member is constructed of polypropylene.

1       5. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 further including a  
2       recess within said concave surface of said cradle member for receiving said photosensor.

**Please cancel Claim 6.**

1       7. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 wherein said support  
2       structure is attached at one end thereof to a circumferential portion of said opaque, semi-cylindrical,  
3       substantially cradle member such that said support structure can be wrapped around a circumference  
4       of said cradle member.

1       8. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 wherein said support  
2       structure is attached at one end thereof to an end portion of said opaque, semi-cylindrical,  
3       substantially cradle member such that said support structure can be wrapped around an axis of said  
4       cradle member.

1       9. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 wherein said adhesive  
2       layer comprises a separate double-sided adhesive layer applied to said concave surface of said cradle  
3       member.

1       --10. (Twice Amended) A non-invasive electro-optical sensor for removable adhesive attachment  
2       to a fingertip of a patient for use in measuring light extinction during transillumination of the blood-  
3       profused tissue within said fingertip, said sensor comprising:

4                   an opaque, semi-cylindrical, substantially rigid cradle member having an electrical conductor  
5                   channel formed therein, a concave surface, a convex surface and a diameter larger than the diameter  
6                   of a human fingertip;

7                   a flexible, initially substantially planar web-like support structure attached at one end thereof  
8                   to said cradle member;

9                   a light source mounted on said concave surface of said cradle member;

10                  a photosensor mounted in said web of said support structure, said photosensor having a  
11                  photo-sensitive surface which directly overlies said light source when said support structure is  
12                  wrapped around a human fingertip within said cradle member; and

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an adhesive layer on said concave surface of said cradle member and/or on a surface of the  
web-like support structure for removably adhesively securing said concave surface of said cradle  
member to a fleshy portion of a human fingertip such that said concave surface is held in  
conformance with said human fingertip without stressing said human fingertip.--

1                  11. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 further including  
2                  means for securing said support structure in a wrapped position around a human fingertip within said  
3                  cradle member such that said light source directly overlies said photosensor.

1                  12. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 wherein said  
2                  opaque, semi-cylindrical, substantially rigid cradle member is constructed of molded polyolefin  
3                  plastic.

1                  13. (Unchanged) The non-invasive electro-optical sensor according to Claim 12 wherein said  
2                  opaque, semi-cylindrical, substantially rigid cradle member is constructed of polypropylene.

1       14. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 further including  
2       a recess within said concave surface of said cradle member for receiving said light source.

**Please cancel Claim 15.**

1       16. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 wherein said  
2       support structure is attached at one end thereof to a circumferential portion of said opaque, semi-  
3       cylindrical, substantially cradle member such that said support structure can be wrapped around a  
4       circumference of said cradle member.

1       17. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 wherein said  
2       support structure is attached at one end thereof to an end portion of said opaque, semi-cylindrical,  
3       substantially cradle member such that said support structure can be wrapped around an axis of said  
4       cradle member.

1       18. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 wherein said  
2       adhesive layer comprises a separate double-sided adhesive layer applied to said concave surface of  
3       said cradle member.